Public Water System ID Number: MO6010707

# 2020 Annual Water Quality Report

(Consumer Confidence Report)

This report is intended to provide you with important information about your drinking water and the efforts made to provide safe drinking water.

#### Attencion!

Este informe contiene información muy importante. Tradúscalo o preguntele a alguien que lo entienda bien.

[Translated: This report contains very important information. Translate or ask someone who understands this very well.]

#### What is the source of my water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Our water comes from the following source(s):

Source Name	Туре
WELL # 9 - 3939 HUSTER RD	GROUND WATER
WELL #10 - 630 FOUNTAIN LAKES TRAIL	GROUND WATER
WELL # 4 - 3892 HUSTER RD	GROUND WATER
WELL # 5 - 3994 HUSTER RD	GROUND WATER
WELL # 6 - 4002 HUSTER RD	GROUND WATER
WELL # 7 - 4034 HUSTER RD	GROUND WATER
WELL # 8 - 3748 DEXTER RD	GROUND WATER

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided below.

Buyer Name	Seller Name
ST CHARLES PWS	ST LOUIS CITY PWS

#### **Source Water Assessment**

The Department of Natural Resources conducted a source water assessment to determine the susceptibility of our water source to potential contaminants. This process involved the establishment of source water area delineations for each well or surface water intake and then a contaminant inventory was performed within those delineated areas to assess potential threats to each source. Assessment maps and summary information sheets are available on the internet at <a href="http://drinkingwater.missouri.edu/swip/swipmaps/pwssid.htm">http://drinkingwater.missouri.edu/swip/swipmaps/pwssid.htm</a>. To access the maps for your water system you will need the State-assigned identification code, which is printed at the top of this report. The Source Water Inventory Project maps and information sheets provide a foundation upon which a more comprehensive source water protection plan can be developed. Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). Contaminants that may be present in source water include:

- A. <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. <u>Inorganic contaminants</u>, such as salts and metals, which can be naturallyoccurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. <u>Radioactive contaminants</u>, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### Is our water system meeting other rules that govern our

**operations?** The Missouri Department of Natural Resources regulates our water system and requires us to test our water on a regular basis to ensure its safety. Our system has been assigned the identification number MO6010707 for the purposes of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are on the following pages of this report. Any violations of state requirements or standards will be further

explained later in this report.

#### How might I become actively involved?

If you would like to observe the decision-making process that affect drinking water quality or if you have any further questions about your drinking water report, please call us at <a href="mailto:636-949-3244">636-949-3244</a> Ext: 6410</a> to inquire about scheduled meetings or contact persons.

#### Do I need to take any special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

#### **Terms and Abbreviations**

**Population**: 73040. This is the equivalent residential population served including non-bill paying customers.

90th percentile: For Lead and Copper testing. 10% of test results are above this level and 90% are below this level.

**AL**: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**HAA5**: Haloacetic Acids (mono-, di- and tri-chloracetic acid, and mono- and dibromoacetic acid) as a group.

**LRAA**: Locational Running Annual Average, or the locational average of sample analytical results for samples taken during the previous four calendar quarters.

**MCLG**: Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MCL**: Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

n/a: not applicable.

nd: not detectable at testing limits.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

ppb: parts per billion or micrograms per liter.

ppm: parts per million or milligrams per liter.

**RAA**: Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

Range of Results: Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Highest Test Result or Highest Value.SMCL: Secondary Maximum Contaminant Level, or the secondary standards that are non-enforceable guidelines for contaminants and may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water. TTHM: Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.

March 25, 2021

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# Contaminants Report

ST CHARLES PWS will provide a printed hard copy of the CCR upon request. To request a copy of this report to be mailed, please call us at 636-949-3244 Ext: 6410. The CCR can also be found on the internet at www.dnr.mo.gov/ccr/MO6010707.pdf.

The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative. No data older than 5 years need be included. If more than one sample is collected during the monitoring period, the Range of Sampled Results will show the lowest and highest tested results. The Highest Test Result, Highest LRAA, or Highest Value must be below the maximum contaminant level (MCL) or the contaminant has exceeded the level of health based standards and a violation is issued to the water system.

Regulated Contaminants

Regulated Contaminants															
Regulated Contaminants	Collection Date	on	Highest Test Result		Range of Sampled Result(s) ow – high)	U	nit	MCL	MCLG	Typical Source					
BARIUM	10/26/20	20	0.0626		0.0626	p	pm	2	2	Disc	harg		ng wastes; Discharge from me Erosion of natural deposits	etal refineries;	
FLUORIDE	10/26/20	20	0.61		0.61	p	pm	4	4	Natu	ral d	leposits; \	Water additive which promote	s strong teeth	
NITRATE- NITRITE	10/26/20	20	0.016		0.016	pį	pm	10	10	Runo	ff fro		er use; Leaching from septic t Erosion of natural deposits	anks, sewage;	
Disinfection Byproducts	Sample F	Point	Monitor Perio		Highest LRAA	Ĭ	Resu	Sampled ult(s) high)	Unit				e		
(HAA5)	DBPDUA	L-01	2020	)	26		1.2	- 29	ppb	60		0	Byproduct of drinking water of	disinfection	
(HAA5)	DBPDUA		2020	)	10			19.3	ppb	60		0	Byproduct of drinking water of	disinfection	
(HAA5)	DBPDUA		2020	)	33		0 - 5	54.2	ppb	60		0	Byproduct of drinking water disinfection		
(HAA5)	DBPDUA	L-04	2020	)	12		0 - 2	21.5	ppb	60		0	Byproduct of drinking water disinfection		
TTHM	DBPDUA	L-01	2020	)	13	0	).55 -	17.2	ppb	80		0	Byproduct of drinking water disinfection		
TTHM	DBPDUA	_	2020		6		0.5	- 13	ppb	80		0	Byproduct of drinking water of		
TTHM	DBPDUA		2020		17			22.9	ppb	80		0	Byproduct of drinking water of		
TTHM	DBPDUA	L-04	2020		7			13.9	ppb	80		0	Byproduct of drinking water of	disinfection	
Lead and Copper	Date		of you	ır wate	ile: 90% er utility ess than	(le	Res	Sampled ults high)	Unit	AL		Sites /er AL	Typical Sourc	е	
COPPER	2016 - 2	2018		0.010		(	0 - 0.	0511	ppm	1.3		0	Corrosion of household plumbing syster		
Microbiolog	•				Result					ICL		MCLG	<b>7</b>		
COLIFORM (	′			а	ary, 2.86% o s positive		oles i	returned		eatment ique Trigger		0	Naturally present in the	environment	
Unregulated C	Unregulated Contaminant Monitoring Rule (UCMR)			le	Collect Date of			High	est Value	t Value (HV)		Ran	Range of Sampled Result(s)		
	Bromide				08/20/	19			39.5				27.7 - 39.5	ppb	
HAA5				05/13/	19			42.28				5 - 42.28	ppb		
	HAA6B	r			08/20/	19			19.88				6.1 - 19.88	ppb	
	HAA9	•			05/13/ <sup>-</sup>				54.51				9.9 - 54.51		
	Mangane				02/04/				0.53				0.53		
To	tal Organic	Carbor	n		05/13/	/19			3880				1070 - 3880	ppb	

#### Violations and Health Effects Information

During the 2020 calendar year, we had the below noted violation(s) of drinking water regulations.

	Compliance Period	Analyte	Туре		
ĺ	No Violations Occurred in the Calendar Year of	2020			

**Special Lead and Copper Notice:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. ST CHARLES PWS is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at <a href="http://water.epa.gov/drink/info/lead/index.cfm">http://water.epa.gov/drink/info/lead/index.cfm</a>. All contaminant sample results from past and present compliance monitoring are available online at the Missouri DNR Drinking Water Watch website at

www.dnr.mo.gov/DWW/. To see the Lead and Copper results, enter your water system's name in the box titled Water System Name, then select Find Water Systems at the bottom of the page. On the next screen, click on the Water System Number. At the top of the next page, under the Help column, click on Other Chemical Results by Analyte. Scroll down to Lead and click the blue Analyte Code (1030). A Sample Collection Date range may need to be entered. The Lead and Copper locations will be displayed under the heading Sample Comments. Scroll to find your location and click on the Sample No. for results. If you assisted the water system in taking a Lead and Copper sample but cannot find your location on the list, please contact ST CHARLES PWS for your results.

Date Identified	Facility	Category Code	Category Description
12/10/2018	WELL # 4 - 3892 HUSTER RD	SGSL	GW Well Seal

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# 2020 Annual Water Quality Report (Consumer Confidence Report) Reseller Contaminants

Regulated Contaminants	Collection Date	Water System	Highest Sample Result	Range of Sampled Result(s) (low – high)	Unit	MCL	MCLG	Typical Source	
ANTIMONY, TOTAL	12/8/2020	ST LOUIS CITY PWS	0.229	0.218 - 0.229	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	
ARSENIC	12/8/2020	ST LOUIS CITY PWS	0.386	0.3 - 0.386	ppb	10	0	Erosion of natural deposits	
ATRAZINE	6/1/2020	ST LOUIS CITY PWS	1.14	0 - 1.14	ppb	3	3	Runoff from herbicide used on row crops	
BARIUM	12/8/2020	ST LOUIS CITY PWS	0.01146	0.01036 - 0.01146	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
CHROMIUM	12/8/2020	ST LOUIS CITY PWS	1.5	1.44 - 1.5	ppb	100	100	Discharge from steel and pulp mills	
FLUORIDE	10/7/2020	ST LOUIS CITY PWS	0.66	0.61 - 0.66	ppm	4	4	Natural deposits; Water additive which promotes strong teeth	
NITRATE-NITRITE	5/12/2020	ST LOUIS CITY PWS	1.17	1.01 - 1.17	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
SELENIUM	12/8/2020	ST LOUIS CITY PWS	1.798	1.772 - 1.798	ppb	50	50	Erosion of natural deposits	

Disinfection Byproducts	Monitoring Period	Water System	Highest LRAA	Range of Sampled Result(s) (low – high)	Unit	MCL	MCLG	Typical Source
(HAA5)	2020	ST LOUIS CITY PWS	36	10.29 - 35.88	ppb	60	0	Byproduct of drinking water
								disinfection
TTHM	2020	ST LOUIS CITY PWS	26	7.773 - 31.05	ppb	80	0	Byproduct of drinking water
								disinfection

### Reseller Violations and Health Effects Information

During the 2020 calendar year, the water system(s) that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Туре	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Yea	ar of 2020			

There are no additional required health effects notices.

# Optional Monitoring (not required by EPA) **Optional Contaminants**

Monitoring is not required for optional contaminants

Secondary Contaminants	Collection Date	Your Water System Highest Sampled Result	Range of Sampled Result(s) (low - high)	Unit	SMCL
ALKALINITY, CACO3 STABILITY	10/26/2020	82.8	82.8	MG/L	U
CALCIUM	10/26/2020	26.2	26.2	MG/L	
CHLORIDE	10/26/2020	26	26	MG/L	250
HARDNESS, CARBONATE	10/26/2020	127	127	MG/L	
MAGNESIUM	10/26/2020	15.1	15.1	MG/L	
MANGANESE	10/26/2020	0.00751	0 - 0.00751	MG/L	0.05
PH	9/7/2017	9.11	9.11	PH	8.5
POTASSIUM	10/26/2020	2.07	2.07	MG/L	
SODIUM	10/26/2020	15.6	15.6	MG/L	
SULFATE	10/26/2020	52.6	52.6	MG/L	250
TDS	10/26/2020	194	194	MG/L	500

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Reseller Secondary Contaminants	Collection Date	Water System Name	Highest Sampled Result	Range of Sampled Result(s) (low - high)	Unit	SMCL
ALKALINITY, TOTAL	12/31/2020	ST LOUIS CITY PWS	203	52 - 203	MG/L	
ALUMINUM	12/8/2020	ST LOUIS CITY PWS	0.00511	0.0005 - 0.00511	MG/L	0.05
BROMIDE	12/30/2019	ST LOUIS CITY PWS	0.0687	0.0362 - 0.0687	MG/L	0.05
CALCIUM	9/22/2020	ST LOUIS CITY PWS	28.4	25.6 - 28.4	MG/L	
CONDUCTIVITY @ 25 C UMHOS/CM	9/22/2020	ST LOUIS CITY PWS	651	516 - 651	UMHO/0	CM
MANGANESE	12/8/2020	ST LOUIS CITY PWS	0.00324	0.00025 - 0.00324	MG/L	0.05
METOLACHLOR	5/28/2019	ST LOUIS CITY PWS	0.44	0.36 - 0.44	ppb	
NICKEL	12/8/2020	ST LOUIS CITY PWS	0.00124	0.00115 - 0.00124	MG/L	0.1
PH	9/22/2020	ST LOUIS CITY PWS	9.79	9.33 - 9.79	PH	8.5
SILVER	12/8/2020	ST LOUIS CITY PWS	0.00104	0 - 0.00104	MG/L	0.1
SULFATE	10/7/2020	ST LOUIS CITY PWS	213	210 - 213	MG/L	250
TEMPERATURE (CENTIGRADE)	9/22/2020	ST LOUIS CITY PWS	25.3	21.7 - 25.3	С	
ZINC	12/8/2020	ST LOUIS CITY PWS	0.00104	0 - 0.00104	MG/L	5

Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply.